



JUKI

JUKI CORPORATION

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The JUKI Group Launches Its First Spectrophotometer, the AY555



JUKI DENSHI KOGYO CORPORATION, a subsidiary of JUKI Corporation, has successfully commercialized its first spectrophotometer, the AY555. While the subsidiary will continue with the development and manufacturing, TOKYO SANGYO CO., LTD. will be responsible for sales of the product, which will begin on October 17, 2016, focused mainly on Japan, Korea, Taiwan and China.

A spectrophotometer is an instrument designed to describe color accurately by measuring reflection and transmission properties and digitizing three attributes of color (hue, brightness, and saturation). Made for high-level quality checks, the AY555 can be used for product management and R&D in many applications. For example, ensuring that delivered products have a specified color, and confirming that colors of a former product and its newer version match after materials have been changed. These evaluations are made possible through high-accuracy color measurement at an optical resolution ten times that of human vision.

The AY555 is a light-weight, compact, standalone instrument that achieves on-site ease of use. With its long, narrow form, the instrument can be placed close to a computer for easy reading of measured data, comparison, and management. A first in the industry, the AY555 is a desk-top, high-performance spectrophotometer equipped with an LED light source, allowing energy-saving performance and lower maintenance costs due to its long lifetime.

JUKI DENSHI KOGYO has been developing and manufacturing this spectrophotometer under the

key initiatives for collaborative "Group Business," whereby JUKI's manufacturing subsidiaries develop and manufacture products for each other on a commission basis. Using the AY555, colors of a diverse types of materials can be measured, which include solids, powders, granules, liquids and viscous materials. Target industries include the paint, resin, cosmetics, food, and medical sectors, as well as evaluating the colors of fabrics and yarns in the apparel industry (JUKI's primary client sector). Our sales strategy will be focused on making proposals for practical applications.

◆Features

●Easy measurement of color differences

The AY555 is used to determine whether or not the color difference between a reference and target is within the acceptable level.

●The industry's first adoption of an LED light source

The quantity of light from an LED (semiconductor) is affected by self-heating and ambient temperature. To correct for any variances, the AY555 adjusts light quantity and the sensitivity of the sensor, which made the industry's first adoption of an LED light source possible for a desk-top, high-performance spectrophotometer. LEDs also allow for energy-saving performance and lower maintenance costs due to their long lifetime.

●Compact and light-weight standalone instrument

Its long, narrow form achieves portability and saves space. The instrument can be set next to the computer for efficient reading of measured data, comparison, and management.

●A wide range of target materials

Thanks to its capability to measure both reflected and transmitted light, the instrument can be used for solids, powders, granules, liquids, and viscous and transparent materials. Its measurement area ranges from 5 to 30 mm in diameter.

●Large LCD screen offers ease of reading and operation

Operational instructions and measurement results are displayed on a 5-inch LCD, and its readability and ease of use achieve excellent work efficiency. The interface is switchable between Japanese, English, Chinese, and Korean.

◆Release date: October 17, 2016